

America's Priceless Heritage:

Cultural and Fossil Resources on Public Lands



U.S. Department of the Interior Bureau of Land Management November 2003



Preface:

An Invitation to the Reader

The Bureau of Land Management (BLM) is responsible for managing 261 million acres of public land—about one-eighth of the United States. Most of these lands are in the Western United States, including Alaska, and they include extensive grasslands, forests, high mountains, arctic tundra, and deserts. BLM also manages about 700 million acres of subsurface mineral resources, as well as numerous other resources, such as timber, forage, wild horse and burro populations, fish and wildlife habitat, wilderness areas, and archaeological, historical, and paleontological sites.

BLM administers the public lands within the framework of numerous laws, the most comprehensive of which is the Federal Land Policy and Management Act of 1976 (FLPMA). FLPMA directs BLM to follow the principle of "multiple use," which means managing the public lands and their various resource values "so that they are utilized in the combination that will best meet the present and future needs of the American people." This multiple use mission requires BLM to address quality of life issues, including providing clean air and water; providing recreational opportunities; protecting wildlife; and safeguarding cultural and fossil resources; as well as providing for a sound economy through the production of energy, food, and fiber and by sustaining local communities and their heritage.

Given the scope of its multiple use mission, BLM affects more Americans on a daily basis than any other land management agency. The Bureau constantly faces the challenge of ensuring a balance of land uses among perspectives that are occasionally, if not often, competing. BLM recognizes that people who live near the public lands have the most direct connection and knowledge of them, as well as a commitment to their stewardship. At the same time, the Bureau maintains a national focus because these lands belong to all Americans, whose appreciation of them continues to increase.

BLM's central challenge is to balance the demands of growth and the imperative for conservation. America is entering into a new era of conservation to achieve a healthier environment and a more secure economy—what Secretary of the Interior Gale Norton





calls the "new environmentalism." Secretary Norton sums this new environmentalism up in a visionary approach she calls the "four Cs"—using communication, cooperation, and consultation, all in the service of conservation. At the heart of the four Cs is the Secretary's belief that for conservation to be successful, BLM must involve the people who live on, work on, and love the land.

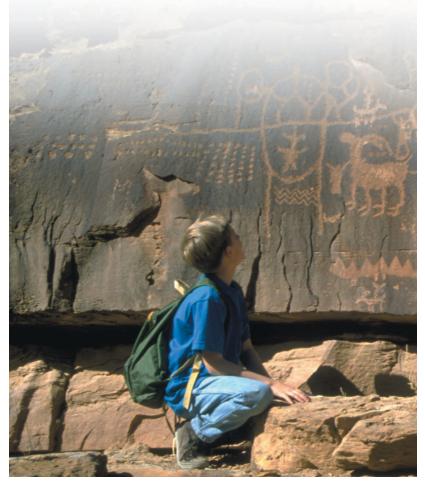
The Bureau's ability to partner with public land users; local residents; nonprofit groups; universities; "friends of" organizations; and State, local, and tribal governments fosters a wide and diverse support network. This network is essential not only because the agency has limited staff and budget resources, but because there is a wide variety of stakeholders who are concerned about public land management. The Bureau has been working cooperatively with partners and volunteers for decades and that work has yielded outstanding results towards attaining common goals and values.

Secretary Norton's approach to conservation is especially relevant to the management of cultural and fossil resources on public lands. These resources are a constant source of fascination for visitors. People look to these resources for recreational opportunities...for fulfilling their curiosity about the recent and remote past...for contemplating their origins...for preserving and continuing their cultures...for finding peace and quiet. The Secretary's approach to managing these resources was furthered on March 3, 2003, when President Bush signed a new Executive Order, which directs Federal agencies to advance the protection, enhancement, and contemporary use of historic properties, particularly by seeking public-private partnerships to promote the use of such properties as a stimulus to local economic development. The Executive Order is an important component in a new White House initiative called Preserve America, which was announced on March 3, 2003 by First Lady Laura Bush. The *Preserve America* program will serve as a focal point for the support of the preservation, use, and enjoyment of America's historic places.

The Bureau is proud of its mission and understands why it is crucial to the Nation's future. The Bureau's vision is to live up to this ambitious mission and thereby meet the needs of the lands and our people. In order to achieve this goal, the Bureau must seek new ways of managing that include innovative partnerships and, especially, a community-based focus that

involves citizen stakeholders and governmental partners who care about the public lands and the cultural and fossil resources found on them. This document is an invitation to you—the public BLM serves—to continue your ongoing dialogue with us about the health and future of the Nation's cultural and natural legacy. Tell us what is important to you, what you care most about, what you want saved, and how BLM can work collaboratively to preserve our priceless legacy.

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CALIFORNIA

Statistical Overview

Acres of public land	15 million acres
Acres inventoried for cultural properties (FY 2002)	29,618 acres
Acres inventoried for cultural resources (to date)	1,690,099 acres
Cultural properties recorded (FY 2002)	314 properties
Cultural properties recorded (to date)	26,421 properties
Cultural Resource Use Permits in effect (FY 2002)	123 permits
National Register of Historic Places listings (to date)	34 listings
National Register of Historic Places contributing properties	1,149 properties
Section 106 class III undertakings (FY 2002)	384 undertakings
Section 106 data recovery, projects (FY 2002)	41 projects
Section 106 data recovery, properties (FY 2002)	120 properties
Interpreted places	94 places

Cultural Resources

1. Program Summary

California's cultural heritage staff consists of over 20 specialists working in 15 field offices. Seven master's degree candidates work alongside BLM staff, enhancing their skills, with an eye towards eventually replacing the current generation of archaeologists.

Staff time is focused on processing the huge caseload of land use projects, which include proposals for infrastructure development, California's cultural heritage staff consists of over 20 specialists working in 15 field offices.



East Cronese Lake near Barstow contains deep, rich shell middens, which represent use of the shellfish resources that were located at the terminus of the Mojave River as it filled the desert pluvial lakes. In California,
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Train Barn, a 1920s bungalow, and debris from the Elk River Mill and Lumber Company and townsite of Falk.

oil and gas development, sand and gravel extraction, pipelines, rights-of-ways, land exchanges, and much more. While the bulk of the work required to comply with section 106 of the National Historic Preservation Act is conducted by cultural resource use permittees, over 90 percent of BLM staff time is still spent completing work in compliance with section 106. Cultural resource specialists in each field office also spend their time completing work in compliance with section 110 of the National Historic Preservation Act, such as proactive inventory, site evaluation, site protection, and interpretation, although this target has yet to be attained. In California, BLM has 34 sites listed in the National Register, but estimates that it has at least 5,000 sites eligible for listing.

Each year, BLM California field office employees spend time working with the public during California Archaeology Week. BLM also helps sponsor the California Archaeology Month poster. In the last 3 years, California has sponsored the Archaeological and Cultural Awareness Program, which provides the general public and BLM staff with opportunities to participate in site excavation and Native basketry activities.

In California, BLM also works closely with the State's Off-Highway Vehicle Division to provide for the monitoring and protection of historical resources through the California Archaeological Site Stewardship Program. Currently, over 200 site stewards report on conditions at archaeological and historic sites all over the State.

BLM California has over 20 memorandums of understanding with in-State Indian tribes, including one with the removed Modoc of Oklahoma. California works closely with the Native American Heritage Commission and has had a memorandum of understanding with them since 1983.

Graduate research for theses and field school activities are all a part of a growing program involving universities throughout the State.

2. State Cultural History

Controversy surrounds the question of the earliest occupants of the State. Research from the 1930s to the present has focused on the dry lake beds of the Great Basin and California deserts, attempting to discover the earliest site in North America. Public lands in the Christmas Canyon Area of Critical Environmental Concern, in Panamint Valley, and at Silver Lake near Barstow have yielded materials dating back more than 10,000 years. Organic materials indicate that earlier dates are possible, especially in the Upper Mojave, where Pleistocene lakes were up to 640 feet deep and existed well into the Holocene era. Work at the Calico Archaeological District may eventually show that the California Desert was inhabited thousands of years before the timeframe traditionally accepted by North American archaeologists.

Archaeology confirms there was a substantial population in California during the Middle Horizon, from about 6000 to 3000 B.C. Like Archaic populations elsewhere, California's inhabitants used stone tools to process vegetable foods and to tip their darts for hunting. Acorns and wild grasses provided a substantial portion of the diet, supplemented by fish and small game.

From about 1000 B.C. to A.D. 1000, the deserts in the south and the Great Basin in the east became drier, and the population in California seems to have shifted to inland valleys and the coast, where fishing contributed substantially to the economy. The bow and arrow were introduced during this period, as were ceramic manufacturing, some agriculture, and sedentary villages.

After A.D.1000, until the time of contact with Europeans, population growth throughout the State led to human exploitation of resources in all of the State's ecological zones. Population estimates for this period range from 300,000 to 500,000. The people engaged in a variety of different subsistence tasks, including hunting and gathering, fishing, growing minor crops, and implementing flood plain agriculture. Acorns and other native plants were harvested, and corn, squash, and beans were planted in certain areas of the State.

European contact increasingly displaced and destroyed native peoples between 1540 and 1850 through disease, conquest, and destruction of native resources. By 1900, California's native population was reduced to only 20,000 people, scattered to various parts of the State where they were often unfamiliar with the territory and unable to follow traditional ways of making a living. Beginning in 1882, reservations for tribes and for family groups were established by Executive order. As a result, the approximately 107 tribes in California today are found on reservations or rancherias throughout the State.

The Spanish began settling the deserts in the 1600s. The De Anza expedition was the first to cross the desert in 1776 and arrive in



A wikiup on the western slope of the southern Panamint Mountains near Ridgecrest appears to have been associated with gold exploration and used as late as 1890.

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Cape Mendocino Lighthouse restoration at Mal Coombs Park, Shelter Cove, in 2000.

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San Francisco. The De Anza National Historic Trail crosses public lands under the jurisdiction of the El Centro and Palm Springs Field Offices. In 1769, the Spanish founded the Mission San Diego De Alcala, which was the first permanent European settlement. California remained a part of Spain throughout the subsequent mission period until Mexican independence in 1834. In 1849, California became an American territory, then in 1850, a State.

The discovery of gold in 1849 brought a flood of prospectors to California. Many stayed to develop the State, contributing to agriculture and other industries. The advent of the railroad towards the end of the 19th century and homestead laws further helped open markets and foster settlement, especially in the desert areas. Major military development, especially during World War II, bolstered the State's economy and dominated the southern landscape. Rapid urbanization in the post-war years has increased pressures on public lands for recreation.

3. Cultural Resources At Risk

In 1978, a study of the California Desert showed that 36 percent of the archaeological sites already had been damaged and that the continuing loss of sites was predicted to occur at the rate of 1 percent per year. Public education and law enforcement efforts are believed to have reduced the rate of loss. Still, vandalism, motorized use, erosion, natural deterioration, and casual collecting continue to affect sites in California, although the extent of the problem is unknown. With the establishment of the California Archaeological Site Stewardship Program in recent years, the first real attempt to systematically monitor archaeological sites is underway. Eventually, this systematic monitoring should yield better data on the extent of deterioration and destruction of archaeological resources on public land.

4. Major Accomplishments

- Dedicated time to Section 110 activities, nominated and listed properties on the National Register of Historic Places, and hired seven staff specialists and six student trainees to meet State program obligations under the National Programmatic Agreement and State Protocol.
- Developed a Site Stewardship program with approximately 200 site stewards, which received the 2002 Governor's Historic Preservation Award.

- Involved 90 volunteers in the Archaeological and Cultural Awareness Program, a 2-week class in which the public has the opportunity to help survey for or excavate archaeological sites, focusing on those that have been damaged by looting or other careless endeavors, or to work with native peoples in preserving native plant species or harvesting native plants and processing them into raw materials used to manufacture baskets.
- Trained most California managers, supervisory staff, and cultural resources specialists at a Native American Coordination and Consultation Class sponsored by the BLM National Training Center/Desert Managers Group.
- Contracted for a contextual study of the General George S. Patton Desert Training Center/California— Arizona Maneuver Area, and for the National Register nomination of the Iron Mountain Divisional Camp.
- Developed a list of cultural resource properties that managers and program staff have targeted for purchase or exchange with a willing seller; the Archaeological Conservancy has pledged to assist in the acquisition of some key sites.
- Used site banking techniques at the Bishop Field Office to acquire a significant archaeological resource in exchange for a minor archaeological site, with the concurrence of the State Historic Preservation Office staff.
- Engaged in numerous activities to stabilize sites, develop historical context studies, protect sites through barriers and fencing, interpret cultural resources, monitor and document rock art sites, inventory land burned in the 2000 fire season, work with the Border Patrol to protect sites from vehicular impacts, acquire a historic Chinese townsite, promote studies of petroglyph sites, and inventory and evaluate cultural resources using field schools, volunteers, and student labor.
- Developed a partnership with Mexico's (Baja California)
 National Institute of Anthropology and History to better
 administer the lands along the Mexico–USA border,
 emphasizing the preservation of a shared common
 heritage, and held annual (since 2000) workshops and
 conferences to share scarce skills.



A basketweaver repairs a 90-year-old baby basket at the "Weaving Connections" event, July 2000.

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In addition to the native peoples, the Chinese, African-Americans, Mexicans, and Japanese all played an important part in California's history.



Stabilization of the 1906 Amargosa stage station or payroll building, which was also used as a saloon and bunkhouse along the Tonopah and Tidewater Railroad.

5. Ethnic, Tribal, and Other Groups to Whom BLM Cultural Resources Are Important

Today California has more tribes than any other State in the union. Officially 107 federally recognized tribes are scattered throughout the State. While some of the tribes live on large reservations, such as the Hoopa or the Colorado River Indians, most live on small rancherias consisting of 40 acres or less. They are the poorest segment of California's diverse population, although gaming has allowed these tribes to begin economic development and share their money with nongaming tribes. Tribes are interested in cultural resources on public lands that their ancestors occupied. BLM works closely with many of these tribes in understanding their need for native plant materials to construct baskets and for clay to construct pots. Some of these materials are now found only in wilderness where access is often restricted.

California also has over 50 tribes and Indian groups that are not federally recognized but have either petitioned for acknowledgment or are expected to do so in the future. These groups are also scattered throughout the State. Many previously were recognized, but lost or gave up their Federal status due to historic events. BLM works closely with the California Native American Commission to ensure that we are aware of these groups and coordinate with them.

In addition to the native peoples, the Chinese, African-Americans, Mexicans, and Japanese all played an important part in California's history. Current work in both northern and southern California is exposing the deep-rooted connections of Chinese immigrants to sites found on the public lands. Black history is embellished in the El Centro Field Area with the dedication of an interpretive sign honoring the Buffalo Soldiers who patrolled the Mexico-California border from their facilities at nearby Campo in San Diego County. The history of Mexicans in California is widespread and can be enjoyed on much of the public lands. Each year many Mexican families, for example, hold an annual picnic at Joaquin Rocks, the alleged location of the legendary silver and gold acquired by California's "Robin Hood of Eldorado," Joaquin Murrieta. At Tule Lake, the remnants of a World War II internment camp are being studied for future preservation.

6. Existing Partnerships

• Society for California Archaeology to promote California Archaeology Month, during which field offices give tours

- and work with local archaeological societies, historical societies, and tribes to foster good and effective site stewardship practices.
- Mendocino National Forest, California State University at Chico and Sonoma, University of California at Davis and Berkeley, State Parks, and Lake County Indian tribes, working with the Ukiah Field Office, for the development of a regional Native American museum and curation facility.
- Multiple academic institutions, including Notre Dame, Shasta Community College, and California State Universities at Humbolt, Fresno, and Sonoma, working with BLM field offices, to document cultural resources, curate archaeological materials, and conduct research.
- California Office of Historic Preservation, through a challenge cost-share agreement, to automate cultural resource records. BLM accrued approximately \$50,000 worth of benefits from State Historic Preservation Office staff and volunteer work on digitizing and scanning records.
- Native American History Project, Inc., through a cooperative agreement, to develop an interpretive photographic exhibit entitled "Embracing Cultures, Spanning Generations," depicting the lives of indigenous Pomo Indians.
- Shelter Cove Lighthouse Preservation Society, through a cooperative agreement, for the relocation of the Cape Mendocino Lighthouse and development of a public information and interpretive center.
- Mexico's (Baja California) National Institute of Anthropology and History, through a memorandum of understanding, for the preservation of shared heritage along the Mexico/USA border.
- California Off-Highway Vehicle Division, for inventories
 of Off-Highway Vehicle Open Areas, which help determine
 the location and significance of resources so that the landscapes can be managed more efficiently. The Division
 has funded two major inventories of open areas and has
 indicated an interest in continuing to fund these through
 fiscal year 2008.

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Ayers Rock, near Ridgecrest, contains a pictograph that appears to represent a Shaman and a spirit helper, which may be a ringtail cat.

Throughout
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is bringing
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communities.

 Society for California Archaeology, through grants from the California Off-Highway Vehicle Division, for the California Archaeological Site Stewardship Program, which involves numerous other partners as well, including the California Office of Historic Preservation, California State Parks and Recreation Department and several park units, Los Angeles Division of Water and Power, California Native American Heritage Commission, Maturango Museum, Imperial Valley Museum, Coachella Valley Archaeological Society, East Mojave Preserve, Adopt-A-Cabin Program, Colusa Tribe, Cortina Rancheria, and many BLM field offices.

7. Economic Benefits

Towns throughout California are encouraging visitation to the remote areas managed by BLM. BLM has designated Backcountry Byways to lure the visitor into these areas. An example of where heritage tourism has flourished is in the community of Ridgecrest, where rock art sites have become a weekend destination. Audited visitation to Little Petroglyph Canyon, which is managed by the Maturango Museum and scheduled through China Lake Naval Weapons Center, brings in over \$1.3 million each year to the local economy. A rock art brochure for eastern California serves to enhance the tourist experience and encourages watchful visitors to serve as BLM's "eyes and ears" at these sites.

Throughout the State, family-oriented heritage tourism is bringing money into small communities. There has been a resurgence of interest in Route 66, the Old Spanish Trail, the Yreka Immigrant Trail, migration to the West, and local history, all of which are promoting tourism in a significant way.

Paleontological Resources

1. Program Summary

BLM California administers 15 million surface acres of public land, including 1.6 million acres in Nevada. Approximately seven Paleontological Resource Use Permits are active in the State for academic researchers, college students, and volunteers working on various types of field investigations and excavations. Some of this activity is based on industrial or development projects that cross large blocks of public lands, such as the Cadiz Water Pipeline in the Mojave Desert and the Equilon Pipeline project that crosses the southern portion of the State, as well as Arizona and New Mexico.

Institutions that are active in paleontological research in the State are the L.A. County Museum; San Bernardino County Museum; University of California, Berkeley; and several others.

In California, BLM manages several areas for their paleontological values. Among these are three Areas of Critical Environmental Concern: Dinosaur Trackway, Marble Mountain Fossil Bed, and Rainbow Basin. In addition, there are other areas that are the focus of special management: the Maricopa and McKittrick Ice Age tar-seep fossil beds and the Pyramid Hill–Temblor Formation marine vertebrate bone beds.

2. State Paleontological History

California's landscapes reflect a long and varied geologic and paleontologic history. Some of the rocks now exposed at the surface are among the oldest on Earth. Some of the earliest known Cambrian age fossils, as well as diverse Paleozoic age invertebrates, are found in the southeast California region extending from the eastern Sierra–Inyo–White Mountains to the Marble Mountains–Mojave Desert area. Vast expanses of shallow seas existed where trilobites, corals, and other types of invertebrates thrived.

From about 250 to 65 million years ago, shallow seas were home to an assemblage of large predatory marine reptiles such as mosasaurs, plesiosaurs, and tiny swimming reptiles living alongside exotic invertebrates. Dinosaurs existed along the coastal margins of the seaways. The early Cenozoic era was characterized by vast, semitropical rainforests with a rapidly diversifying mammalian fauna in the coastal and mountain areas, as well as a warm, tropical interior seaway with abundant marine life. The basin and range topography of the Mojave Desert region has yielded an incredible array of Oligocene and Miocene age (40to 5-million-year-old) terrestrial mammal faunas consisting of horses, camels, predatory cats and dogs, and other forms. One of the most complete records of Miocene-age marine vertebrate life in North America is found in the southern San Joaquin Valley area and includes whales, dolphins, seals, sharks, and a variety of other marine life.

The famous California fossil-bearing tar seep deposits along the west side of the San Joaquin Valley have yielded fossils from mammoths, horses, camels, llamas, bears, bison, ground sloths, saber-toothed cats, dire wolves, and dozens of small rodents, birds, and insects, totaling over 250 species.

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3. Paleontological Resources at Risk

Urbanization of large regions in southern, central, and northern California is creating significant impacts to the resource through off-highway vehicle use and unregulated recreational and commercial collecting. In areas such as the Pyramid Hill marine vertebrate bone beds near Bakersfield, the Dinosaur Trackway Area of Critical Environmental Concern near Needles, and the Rainbow Basin Area of Critical Environmental Concern near Barstow, off-highway vehicle activities are heavily impacting the fossil resources. In other areas, California's paleontological resources are being lost through natural processes of weathering and erosion, as well as through vandalism and unauthorized collecting.

4. Major Accomplishments

- Made a major scientific discovery of the first fossil primates in California. These specimens were collected from middle-Tertiary-age sediments in the northern Mojave region under a Paleontological Resource Use Permit and are the subject of ongoing scientific research.
- Supported "The Millennium Conference in California's Desert." A special 1-day session at the March 2001 conference highlighted recent paleontological investigations within the California Desert District.

5. Existing Partnerships

- Buena Vista Museum, working with the Bakersfield Field Office, to preserve and manage Ice Age fossil resources in the Maricopa and McKittrick tar-seep deposits. The deposits rival Rancho La Brea in the diversity of fossil land mammals.
- Buena Vista Museum, working with the Bakersfield Field Office, to preserve and manage Miocene-age (20- to 25-million-year-old) marine fossil vertebrate resources that include whales, dolphins, seals, sharks, and other fish.

6. Economic Benefits

There are five major museums of natural history in California and several local municipal museums. Visitation to these institutions contributes significantly to tourist revenues in California.

